



**TOOELE  
ARMY  
DEPOT**

**FINAL  
DECISION DOCUMENT  
RCRA CORRECTIVE ACTION  
GROUP "B" NO ACTION  
SOLID WASTE MANAGEMENT UNITS  
14, 28, 38, AND 47**

Prepared for:

TOOELE ARMY DEPOT  
Tooele, Utah

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**NOVEMBER 2000**

**DECISION DOCUMENT  
RCRA CORRECTIVE ACTION  
GROUP "B" NO ACTION  
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**TOOELE ARMY DEPOT, TOOELE, UTAH**

**1. Purpose**

This decision document describes the determination of "No Further Action Required" at the following Solid Waste Management Units (SWMUs) located at Tooele Army Depot, Tooele, Utah.

- SWMU 14 (TEAD-80), Sewage Lagoons
- SWMU 28, (TEAD-22), 90 Day Drum Storage Area
- SWMU 38 (TEAD-30), Industrial Wastewater Treatment Plant
- SWMU 47 (TEAD-69), Boiler Blow-down Areas

This determination was made in accordance with the State of Utah, Department of Environmental Quality, Hazardous Waste Management Rules (R315-101); The Tooele Army Depot Resource Conservation and Recovery Act (RCRA) Post Closure and Corrective Action Permit; and Army Regulation (AR) 200-1. The "No Further Action" determination was made upon completion of the Phase II RCRA Facility Investigation for the Group "B" Suspected Release SWMUs (December 1997) by Tooele Army Depot, with support from the Utah Department of Environmental Quality, and the U.S. Environmental Protection Agency, Region 8.

**2. Site Background**

With the exception of SWMU 14, the sites addressed by this decision document are located on property that was transferred to the Redevelopment Agency of Tooele City in December 1998. The property was transferred under the Department of Defense (DoD) Early Transfer Authority as provided by Section 334 of the FY 1997 Defense Authorization Act (Public Law 104-201) and codified in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 120(h)(3)(C).

***2.1 SWMU 14 (TEAD-80), Sewage Lagoons***

The sewage lagoons are located in the northeast portion of the installation. This site consists of two separate lagoons approximately 7.3 acres each, which are approximately 4 feet deep. The capacity of each lagoon is approximately 9 million gallons. The lagoons were constructed in 1974 for the receipt of domestic sewage from the Tooele Army Depot Administration and Maintenance/Remanufacturing areas.

***2.2 SWMU 28 (TEAD-22), 90 Day Drum Storage Area***

The 90 Day Drum Storage Area is a 3.4 acre fenced storage lot. The lot was used as a temporary storage facility for RCRA hazardous wastes generated by Tooele Army Depot operations. Wastes were stored in this facility awaiting disposal at an off-site Treatment, Storage, and Disposal Facility (TSDF).

### ***2.3 SWMU 38 (TEAD-30), Industrial Wastewater Treatment Plant***

Operation of the industrial Wastewater Treatment Plant (IWTP) began in November 1988. The IWTP was constructed to treat wastewater generated by industrial processes located within the old Tooele Army Depot industrial complex. Approximately 80% of the treated wastewater was recycled and reused in the industrial area, with the remainder being discharged to the Tooele City Publicly Owned Treatment Works (POTW). Treatment at the IWTP included air strippers for removal of volatile organic compounds, a flocculator and clarifier for settling out metals, sand filters for removal of solids, and granular activated carbon for removing additional volatile and semi-volatile organic compounds. In 1989, concerns were raised with waste handling practices at the IWTP, as spent carbon, stored in open storage bins outside of the building, was being wind blown from the containers onto nearby surface soils.

### ***2.4 SWMU 47 (TEAD-69), Boiler Blow-down Areas***

Buildings 606, 610, 637, and 691 located in the old Tooele Army Depot industrial complex contained boilers to generate steam for heating purposes. During boiler plant maintenance, the boilers were back-flushed, producing what is termed blow-down water. Tannic acid, used to reduce scaling during operation of the boilers, was discharged to the environment as a component of the blow-down water.

## **3. Nature and Extent of Contamination**

Site characterization, risk assessments, and the determination of "No Further Action" for SWMUs 14, 28, 38, and 47 are documented in the Revised Final, Tooele Army Depot, Group "B" Suspected Releases SWMUs, Phase II RCRA Facility Investigation (RFI) Report dated December 1997.

### ***3.1 SWMU 14 (TEAD-80), Sewage Lagoons***

Chemicals of Concern (COPCs) identified in the Phase II RFI and associated risk assessments included metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). COPCs identified were Beryllium, Cadmium, Copper, Mercury, Selenium, Silver, Vanadium, Zinc, Benzo(a)anthracene, bis(2-ethylhexyl)phthalate, and Trichloroethylene.

### ***3.2 SWMU 28 (TEAD-22), 90 Day Drum Storage Area***

Chemicals of Potential Concern (COPCs) identified in the Phase II RFI were Calcium, Chromium, Magnesium, Sodium, Acetone, Butyl benzyl phthalate, and Total Petroleum Hydrocarbons. Phase II sampling results indicated that contamination at the site is localized and that there is no wide-spread contamination of sub-surface soils.

### ***3.3 SWMU 38 (TEAD-30), Industrial Wastewater Treatment Plant***

Contaminants detected in the surface soils on the west side of the IWTP included minor concentrations of VOCs and SVOCs. Analysis of the spent carbon which had been found on the surface surrounding the storage bins detected concentrations of metals as well as VOCs and SVOCs. The COPCs identified in the RFI included Calcium, 2-methylnaphthalene, Naphthalene, Phenanthrene, Phenol, Trichlorofluoromethane, and di-N-butyl- phthalate.

### ***3.4 SWMU 47 (TEAD-69), Boiler Blow-down Areas.***

Although low levels of contamination were detected at three of the four buildings that comprise this site (Buildings 600, 610, and 637), the RFI investigations determined that contaminants are not being released directly to the environment, rather the boiler blow-down was being discharged to the sewer system. However, Building 691, effluent from multiple sources, including boiler blow-down, paint booths, as well as interior and exterior floor drains were potential sources of contamination. These sources of water were collected in a common drain line and discharged to an oil/water separator which discharged into an open ditch located along "L" Avenue. Prior to transfer of the property, the oil/water separator and all floor drains were filled with concrete or grout to prevent future discharges.

## **4. Site Risk**

### ***4.1 SWMU 14 (TEAD-80), Sewage Lagoons***

Risks to current and future workers for the soil/sediment pathway were below the State of Utah industrial criteria. Blood lead levels for workers were estimated to be below CDC guidelines. Risks to future residents, both adults and children, exceeded the State of Utah residential scenario for soil, produce, and beef pathways. Cancer risks for groundwater pathways exceed  $1 \times 10^{-6}$  for future residents only. Blood lead levels were estimated to exceed the CDC guidelines for resident children.

### ***4.2 SWMU 28 (TEAD-22), 90 Day Drum Storage Area***

The results of the human health risk assessment under both worker and residential land use scenarios (current and future), indicate that all non-cancer his and cancer risks were below the State of Utah industrial and residential criteria.

### ***4.3 SWMU 38 (TEAD-30), Industrial Wastewater Treatment Plant***

The human health risk assessment conducted on this site indicated that all risks to workers and residents, both cancer and non-cancer, were below the State of Utah industrial and residential criteria.

### ***4.4 SWMU 47 (TEAD-69), Boiler Blow-down Areas***

The results of the human health risk assessment showed no unacceptable risk to any receptor through any pathway. Blood lead levels in workers and residents were found to be below CDC guidelines.

## **5. Remedial Actions**

As no unacceptable risks to any receptors through any pathway were identified at SWMUs 28, 38, or 47, no remedial alternatives were evaluated. Based on the results of the human health risk assessments that were conducted, a determination of "No Further Action" was made.

The sewage lagoons remain as an active facility supporting Tooele Army Depot, and are currently operating under the Administrative Rules from Groundwater Quality Protection (UAC R317-6). There are no current plans to take the lagoons out of service. The anticipated future use of the facility is continued military use. Engineering controls (fencing) to limit access are

currently in-place. As a result, a determination of "No Further Action" has been made. However, if and when the lagoons are taken out of service, additional evaluation will be necessary to determine the final impact to the environment. At that time, an alternatives analysis may be required.

## **6. Public/Community Involvement**

Tooele Army Depot has a Community Relations Plan, which is executed in accordance with the requirements of the Tooele Army Depot, Post Closure Permit for Post Closure Monitoring and Corrective Action of Solid Waste Management Units. The documented "No Further Action" determinations were made available for public review and comment as part of the approval of the Group "B" Suspected Releases SWMUs, Phase II RCRA Facility Investigation (RFI) Report. These determinations have also been presented at Tooele Army Depot's quarterly Technical Review Committee/Restoration Advisory Board meetings.

## APPROVAL OF SELECTED ALTERNATIVE AT SWMU 14

The selected alternative for the Sewage Lagoons (SWMU 14) The implementation of this alternative will be implemented at no cost. The appropriate approval authority for this action is the Tooele Army Depot Installation Commander.

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Gary B. Carney, LTC, OD  
Commanding  
Tooele Army Depot

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Date

## DECLARATION STATEMENT FOR SWMU 14

As no hazardous substances were found on-site above levels that allow for unlimited use and unrestricted exposure, a "No Further Action" determination is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this action, and is cost effective.

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APPROVAL OF SELECTED ALTERNATIVE AT SWMU 28

The selected alternative for the 90 Day Drum Storage Area (SWMU 28) The implementation of this alternative will be implemented at no cost. The appropriate approval authority for this action is the Tooele Army Depot Installation Commander.

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Gary B. Carney, LTC, OD  
Commanding  
Tooele Army Depot

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Date

#### **DECLARATION STATEMENT FOR SWMU 28**

As no hazardous substances were found on-site above levels that allow for unlimited use and unrestricted exposure, a "No Further Action" determination is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this action, and is cost effective.

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#### **APPROVAL OF SELECTED ALTERNATIVE AT SWMU 38**

The selected alternative for the Industrial Wastewater Treatment Plant (SWMU 38) The implementation of this alternative will be implemented at no cost. The appropriate approval authority for this action is the Tooele Army Depot Installation Commander.

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Gary B. Carney, LTC, OD  
Commanding  
Tooele Army Depot

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Date

#### **DECLARATION STATEMENT FOR SWMU 38**

As no hazardous substances were found on-site above levels that allow for unlimited use and unrestricted exposure, a "No Further Action" determination is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this action, and is cost effective.

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**APPROVAL OF SELECTED ALTERNATIVE AT SWMU 47**



The selected alternative for the Boiler Blowdown Areas (SWMU 47) The implementation of this alternative will be implemented at no cost. The appropriate approval authority for this action is the Tooele Army Depot Installation Commander.

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Gary B. Carney, LTC, OD  
Commanding  
Tooele Army Depot

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Date

#### **DECLARATION STATEMENT FOR SWMU 47**

As no hazardous substances were found on-site above levels that allow for unlimited use and unrestricted exposure, a "No Further Action" determination is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this action, and is cost effective.

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